Message

**Sent:** 2/14/2019 5:29:16 PM
**Subject:** FW: FYI - LA/TX EO state ambient standards)/screening levels

**From:** Casso, Ruben
**Sent:** Thursday, April 6, 2017 1:37 PM
**To:** Smith, Darcie <Smith.Darcie@epa.gov>
**Subject:** FYI - LA/TX EO state ambient standards)/screening levels

## Louisiana Toxic Air Pollutant Ambient Standard

Ethylene Oxide 1.00 ug/m3 annual average
** Based on unit risk factors and a residual risk of one in ten thousand, or other data determined to be superior by the administrative authority.

**Table 51.2**
**Louisiana Toxic Air Pollutant Ambient Air Standards**

| Compounds | CAS Number | Class | Ambient Air Standard [14] (ug/m3*) (8 Hour Ave.) | (ug/m3**) (Annual Ave.) |
|---|---|---|---|---|
| Ethylene oxide | 75-21-8 | I | | 1.00 |
| Formaldehyde | 50-00-0 | I | | 7.69 |
| Glycol ethers [6] | 109-86-4 | II | 571.00 | |
| Hexachloro-1,3-butadiene | 87-68-3 | II | | 4.55 |
| Hexachlorobenzene | 118-74-1 | II | | 0.20 |
| Hexachloroethane | 67-72-1 | II | | 25.00 |
| n-hexane | 110-54-3 | III | 4,190.00 | |
| Hydrazine | 302-01-2 | II | | 0.02 |
| Hydrochloric acid | 7647-01-0 | III | 180.00 | |
| Hydrofluoric acid | 7664-39-3 | III | 61.90 | |
| Hydrogen cyanide | 74-90-8 | III | 260.00 | |
| Hydrogen sulfide | 7783-06-4 | III | 330.00 | |
| Maleic anhydride | 108-31-6 | III | 23.80 | |
| Manganese (and compounds) [1] | 7439-96-5 | II | 4.76 | |
| Mercury (and compounds) [1] | 7439-97-6 | II | 1.19 | |
| Methanol | 67-56-1 | III | 6,240.00 | |
| Methyl ethyl ketone | 78-93-3 | III | 14,000.00 | |
| Methyl isobutyl ketone | 108-10-1 | III | 4,880.00 | |
| Methyl methacrylate | 80-62-6 | III | 9,760.00 | |
| Naphthalene (and Methylnaphthalenes) [12] | 91-20-3 | II | 1,190.00 | |
| Nickel (and compounds) [1] | 7440-02-0 | I | | 0.21 |
| Nickel (refinery dust) [1] | 7440-02-0 | I | | 0.42 |
| Nitric acid | 7697-37-2 | III | 120.00 | |
| Nitrobenzene | 98-95-3 | II | 119.00 | |
| 2-nitropropane | 79-46-9 | II | | 20.00 |
| Phenol | 108-95-2 | II | 452.00 | |
| Phosgene | 75-44-5 | III | 9.50 | |
| Phthalic anhydride | 85-44-9 | III | 145.00 | |
| Polynuclear aromatic hydrocarbons [7] | 206-44-0 | II | | 0.06 |
| Propionaldehyde | 123-38-6 | III | 4,290.00 | |
| Propylene oxide | 75-56-9 | I | | 27.00 |
| Pyridine | 110-86-1 | III | 381.00 | |
| Selenium (and compounds) [1] | 7782-49-2 | II | 4.76 | |
| Styrene | 100-42-5 | II | 5,070.00 | |
| Sulfuric acid | 7664-93-9 | III | 23.80 | |
| 1,1,2,2 tetrachloroethane | 79-34-5 | II | | 1.70 |
| Tetrachloro ethylene | 127-18-4 | II | | 105.26 |
| Toluene | 108-88-3 | III | 8,900.00 | |
| Toluene-2,4-diisocyanate [8] | 584-84-9 | II | 0.86 | |
| Toluene-2,6-diisocyanate [8] | 91-08-7 | II | 0.86 | |
| 1,1,1-trichloroethane | 71-55-6 | III | 45,200.00 | |
| 1,1,2-trichloroethane | 79-00-5 | II | | 6.25 |
| Trichloroethylene | 79-01-6 | II | | 58.80 |
| Vinyl acetate | 108-05-4 | III | 830.00 | |
| Vinyl chloride | 75-01-4 | I | | 1.19 |
| Vinylidene chloride | 75-35-4 | II | | 2.00 |
| Xylene (mixed isomers) [9] | 1330-20-7 | II | 10,300.00 | |
| Zinc (and compounds) [1] [10] [13] | 7440-66-6 | III | 119.00 | |

Explanatory Notes:

*Based on one forty-second of the selected occupational exposure level, or other data determined to be superior by the administrative authority.

**Based on unit risk factors and a residual risk of one in ten thousand, or other data determined to be superior by the administrative authority.

Concentrations based on µg(x)/m3, where x is the elemental form of the metal.

[2] Includes only 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), and octachlorodibenzo-p-dioxin (OCDD).

[3] Includes all isomers of chlorinated dibenzo-furans.

[4] Includes o-, m-, and p-cresol, and mixed isomers.

[5] Includes 2,4- and 2,6-dinitrotoluene and mixed isomers.

[6] Glycol ethers refers to the following compounds:

## Texas screening levels

TX does not seem to have an air monitoring screening level (AMCV) for EO, but they do have both short-term and long-term effects screening levels (ESLs) for EO

| CAS# | Phase | ST ESLs ug/m3 & ppb | LT ESLs ug/m3 & ppb |
|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ethylene oxide | 75-21-8 | - | Not Defined | 20 | 10 | - | Health | Interim | OSHA; TLV | 1-Oct-03 | 2 | 1 | - | Health | Interim | OSHA; TLV | 1-Oct-03 |

# What is the difference between AMCV and ESL?

**AMCVs** and **ESLs** are screening levels for ambient air set to protect human health and welfare.
**AMCVs** are screening levels used in TCEQ's evaluation of ambient air monitoring data to assess the potential for measured concentrations of specific chemicals to cause health or welfare effects. Health-based AMCVs are safe levels at which exposure is unlikely to result in adverse health effects. Long-term AMCVs are similar to the USEPA's inhalation reference concentrations.
**ESLs** are screening levels used in the TCEQ's air permitting process to establish maximum emission rates that are written into enforceable air permits. Health-based ESLs are set 70 percent lower than the safe level, or AMCV. This additional buffer allows TCEQ to take into account exposure to chemicals from multiple sources in air permit reviews.
A more detailed discussion of the differences can be found in Attachment C of the **Uses of ESLs and AMCVs Document**[10], or the **Fact Sheet**[11] (which discusses the health-based values used to review air permits and air monitoring data).

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1.00 ug/m3 annual average
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